

Notice of Allowability

Application No.

09/809,036

Examiner

Behrooz Senfi

Applicant(s)

ALLMEN ET AL.

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/24/2007.
2. ☒ The allowed claim(s) is/are 1, 4-31, renumbered as 1-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see remarks, filed 05/24/2007, have been fully considered and are persuasive. The newly amended claims presented by applicant place the application in allowable condition.

Allowable Subject Matter

2. Claims 1 and 4 – 31, renumbered as 1 - 29 are allowed.

3. The following is an examiner's statement of reasons for allowance: The prior art of the record fails to anticipate or fairly suggest "encoding a video sequence with a non-static viewpoint, the video sequence having a plurality of frames and comprising a background composite constructed from the plurality of frames and foreground regions for individual frames of the plurality of frames, comprising the step of:

Encoding the video sequence based on balancing bits per pixel for the background composite with bits per pixel for the foreground regions to achieve similar quality between the background composite and the foreground regions in a reconstructed video sequence, wherein said bits per pixel for said background composite are based on a number of bits for texture encoding of said background composite and a number of bits for warp points of said background composite, and the bits per pixel for the foreground regions are based on a number of bits for texture encoding of the foreground regions and a number of bits for shape encoding for the foreground regions, as specifies in independent claims 1, 18 (renumbered as 16) and

30 (renumbered as 28), and defined in pages 9 – 10 of the specification, warp points; and determining a background quantization step for the background composite based on an estimated number of bits for a compressed background composite, a number of bits for the compressed background composite, and an estimated background quantization step, wherein the estimated background quantization step is based on the estimated number of bits for the compressed background composite and the number of bits for the compressed background composite and an actual number of bits for the compressed background composite; encoding the background composite once per the video sequence based on the background quantization step; determining a starting foreground quantization step for the foreground regions based on the background quantization step and a desired bit rate; and encoding the foreground regions on a per frame basis based on the starting foreground quantization step to achieve similar quality between the background composite and the foreground regions in a reconstructed video sequence, as specifies in independent claims 19 (renumbered as 17) and 27 (renumbered as 25), and defined in pages 13 - 15 of the specification.

Claims 4 – 17 (renumbered as 2 - 15), 20 – 26 (renumbered as 18 – 24), 28 – 29 (renumbered as 26 – 27) and 31 (renumbered as 29) are allowed with respect to dependency to allowable independent claims.

Contact

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Behrooz Senfi whose telephone number is 571-272-7339. The examiner can normally be reached on M-F 7:00-3:00.

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Behrooz Senfi
Examiner
Art Unit 2621



TUNG
PRIMARY EXAMINER